

WHAT IS CLAIMED IS:

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1. ~~An upholstery pad, comprising:~~

a panel having a front surface, a back surface, and a plurality of edges extending from said front surface to said back surface, said panel further having a fixed portion and a first flap, said first flap being divided from said fixed portion along a first hinging axis, said first flap being continuously pivotable about said first hinging axis between a first relaxed position and a first biased position;

5 a padding member having a front surface and a back surface, at least a portion of said back surface of said padding member being adhesively attached to said front surface of said panel, wherein said padding member extends across said first hinging axis; and

10 a sheet having a front surface and a back surface, at least a portion of said back surface of said sheet being adhesively attached to said front surface of said padding member,

wherein pivoting said first flap about said first hinging axis away from said first relaxed position and toward said first biased position causes a first force to be produced which urges said first flap to be pivoted about said first hinging axis toward said first relaxed position.

2. ~~An upholstery pad, according to claim 1, wherein said first force is at least partially caused by said padding member being placed in tension when said first flap is pivoted about said first hinging axis away from said first relaxed position and toward said first biased position.~~

3. ~~An upholstery pad, according to claim 1, wherein said fixed portion is mechanically fastened to a substructure.~~

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4. An upholstery pad, according to claim 3, wherein said sheet extends across and is adhesively attached to at least one of said edges of said panel and extends onto and is adhesively attached to said back surface of said panel.

5. An upholstery pad, according to claim 3, wherein said panel is perforated along a path parallel to said first hinging axis.

6. An upholstery pad, according to claim 3, wherein said first flap is detached from said fixed portion along a path parallel to said first hinging axis.

7. An upholstery pad, according to claim 3, wherein said front surface of said panel is scored along a path parallel to said first hinging axis.

8. An upholstery pad, according to claim 3, said fixed portion of said panel is fastened to said substructure by at least one push-type panel fastener.

9. An upholstery pad, according to claim 1, said panel having a second flap, said second flap being continuously pivotable, with respect to said fixed portion, along a second hinging axis between a second relaxed position and a second biased position,

5 wherein a portion of said padding member extends across at least a portion of said second hinging axis; and

10 wherein pivoting said second flap about said second hinging axis from said second relaxed position toward said second biased position causes a second force to be produced which urges said second flap to be pivoted about said second hinging axis toward said second relaxed position.

10. An upholstery pad, according to claim 9, wherein said second force is at least partially caused by said padding member being placed in tension when said second flap is pivoted about said second hinging axis away from said second relaxed position and toward said second biased position.

11. An upholstery pad, according to claim 9, wherein said sheet extends across and is adhesively attached to at least one of said edges of said panel and extends onto and is adhesively attached to said back surface of said panel.

12. An upholstery pad, according to claim 9, wherein said panel is perforated along a path parallel to said second hinging axis.

13. An upholstery pad, according to claim 9, wherein said second flap is detached from said fixed portion along a path parallel to said second hinging axis.

14. An upholstery pad, according to claim 9, wherein said front surface of said panel is scored along a path parallel to said second hinging axis.

15. An upholstery pad, according to claim 9, wherein said fixed portion is mechanically fastened to a substructure.

~~16. An upholstery pad, according to claim 15, said fixed portion of said panel is fastened to said substructure by at least one push-type panel fastener.~~

17. A method of constructing an upholstery pad having a first flap which, when said first flap is pivoted about a first hinging axis from a first relaxed position toward a first biased position, is urged to be pivoted about said first hinging axis toward said first relaxed position, said method comprising the steps of:

providing a panel having a front surface, a back surface, and a plurality of edges extending from said front surface to said back surface;

creating a first hinge along a first hinging axis in said panel to divide a first flap of said panel from a fixed portion of said panel, wherein said first flap is continuously pivotable about said first hinging axis between a first relaxed position and a first biased position;

providing a padding member having a front surface and a back surface;

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immersing said padding member into a bath of adhesive resin to saturate said padding member with said adhesive resin;

extracting excess resin from said padding member;

15 placing said padding member, which has been immersed into said bath of adhesive resin and from which said excess resin has been extracted, onto a predetermined location on said front surface of said panel so that said padding member extends across said first hinging axis and so that at least a portion of said back surface of said padding member is in contact with said front surface of said panel;

20 providing a sheet having a front surface and a back surface;

draping said sheet over said front surface of said padding member and said front surface of said panel to produce an upholstery pad assembly, wherein at least a portion of said back surface of said sheet is in contact with said front surface of said padding member;

25 placing said upholstery pad assembly onto a first heatable platen of a press having said first heatable platen and a second heatable platen;

30 mating said first heatable platen and said second heatable platen so as to capture said upholstery pad assembly between said first heatable platen and said second heatable platen for a predetermined period of time and at a predetermined temperature to create a bonded upholstery pad assembly;

separating said first heatable platen from said second heatable platen; and removing said bonded upholstery pad assembly from said first heatable platen.

18. A method of constructing an upholstery pad, according to claim 17, further comprising the steps of:

attaching said sheet to at least one of said plurality of edges of said panel; and attaching said sheet to said back surface of said panel.

19. A method of constructing an upholstery pad, according to claim 17, further comprising the step of trimming excess of said sheet from said bonded upholstery pad assembly.

20. A method of constructing an upholstery pad, according to claim 17, further comprising the step of generating at least one attachment hole in said fixed portion of said panel which is capable of receiving a mechanical fastener for attaching said fixed portion of said panel to a substructure.

21. A method of constructing an upholstery pad, according to claim 17, wherein said step of creating a first hinge comprises perforating said panel along a path parallel to said first hinging axis.

22. A method of constructing an upholstery pad, according to claim 17, wherein said step of creating a first hinge comprises detaching said first flap from said fixed portion along a path parallel to said first hinging axis.

23. A method of constructing an upholstery pad, according to claim 17, wherein said step of creating a first hinge comprises scoring said front surface of said panel along a path parallel to said first hinging axis.

24. A method of constructing an upholstery pad, according to claim 17, said panel further having a second flap which, when said second flap is pivoted about a second hinging axis from a second relaxed position toward a second biased position, is urged to be pivoted about said second hinging axis toward said second relaxed position, said method further comprising the step of creating a second hinge along a second hinging axis in said panel to divide said second flap of said panel from said fixed portion of said panel,

wherein said second flap is continuously pivotable about said second hinging axis between a second relaxed position and a second biased position; and

wherein said padding member extends across said second hinging axis.

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25. A method of constructing an upholstery pad, according to claim 24, wherein said step of creating a second hinge comprises perforating said panel along a path parallel to said second hinging axis.

26. A method of constructing an upholstery pad, according to claim 24, wherein said step of creating a second hinge comprises detaching said second flap from said fixed portion along a path parallel to said second hinging axis.

27. A method of constructing an upholstery pad, according to claim 24, wherein said step of creating a second hinge comprises scoring said front surface of said panel along a path parallel to said second hinging axis.

28. A method of constructing an upholstery pad, according to claim 24, further comprising the step of generating at least one attachment hole in said fixed portion of said panel which is capable of receiving a mechanical fastener for attaching said fixed portion of said panel to a substructure.

29. A method of constructing an upholstery pad having a first flap which, when said first flap is pivoted about a first hinging axis from a first relaxed position toward a first biased position, is urged to be pivoted about said first hinging axis toward said first relaxed position, said method comprising the steps of:

5 providing a panel having a front surface, a back surface, and a plurality of edges extending from said front surface to said back surface;

creating a first hinge along a first hinging axis in said panel to divide a first flap of said panel from a fixed portion of said panel, wherein said first flap is continuously pivotable about said first hinging axis between a first relaxed position and a first biased position;

10 providing a padding member having a front surface, a back surface, and a thickness;

placing said padding member onto a predetermined location on said front surface of said panel so that said padding member extends across said first hinging

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15 axis and so that at least a portion of said back surface of said padding member is in contact with said front surface of said panel;

attaching said padding member to said panel with an adhesive;

providing a sheet having a front surface and a back surface;

20 placing said sheet onto a predetermined location on said front surface of said padding member so that at least a portion of said back surface of said sheet is in contact with said front surface of said padding member; and

attaching said sheet to at least a portion of said panel with an adhesive.

30. A method of constructing an upholstery pad, according to claim 29, further comprising the step of generating at least one attachment hole in said fixed portion of said panel which is capable of receiving a mechanical fastener for attaching said fixed portion of said panel to a substructure.

31. A method of constructing an upholstery pad, according to claim 29, wherein said step of creating a first hinge comprises perforating said panel along a path parallel to said first hinging axis.

32. A method of constructing an upholstery pad, according to claim 29, wherein said step of creating a first hinge comprises detaching said first flap from said fixed portion along a path parallel to said first hinging axis.

33. A method of constructing an upholstery pad, according to claim 29, wherein said step of creating a first hinge comprises scoring said front surface of said panel along a path parallel to said first hinging axis.

34. A method of constructing an upholstery pad, according to claim 29, said panel further having a second flap which, when said second flap is pivoted about a second hinging axis from a second relaxed position toward a second biased position, is urged to be pivoted about said second hinging axis toward said second relaxed position, said method further comprising the step of creating a second hinge along a

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~~second hinging axis in said panel to divide said second flap of said panel from said fixed portion of said panel,~~

~~wherein said second flap is continuously pivotable about said second hinging axis between a second relaxed position and a second biased position; and~~

~~wherein said padding member extends across said second hinging axis.~~

35. A method of constructing an upholstery pad, according to claim 34, wherein said step of creating a second hinge comprises perforating said panel along a path parallel to said second hinging axis.

36. A method of constructing an upholstery pad, according to claim 34, wherein said step of creating a second hinge comprises detaching said second flap from said fixed portion along a path parallel to said second hinging axis.

37. A method of constructing an upholstery pad, according to claim 34, wherein said step of creating a second hinge comprises scoring said front surface of said panel along a path parallel to said second hinging axis.

38. A method of constructing an upholstery pad, according to claim 34, further comprising the step of generating at least one attachment hole in said fixed portion of said panel which is capable of receiving a mechanical fastener for attaching said fixed portion of said panel to a substructure.

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